

CHRISTOPHERS et al
Appl. No. 09/833,799
August 17, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25 (Cancel).

26. (Currently Amended) An isolated ~~nucleic acid~~ cDNA comprising a nucleotide sequence encoding the amino acid sequence: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro- Gln or fragment of said amino acid sequence, which fragment that possesses inhibitory activity against human leukocyte elastase.

27. (Currently Amended) The ~~isolated nucleic acid~~ cDNA according to claim 26 wherein said nucleotide sequence encodes said amino acid sequence.

28. (Currently Amended) The ~~isolated nucleic acid~~ cDNA according to claim 26 wherein said ~~nucleic acid~~ cDNA comprises the nucleotide sequence:

GCTCAAGAACCAGTTAAAGGTCCTGTGTCTACT

AAGCCAGGTTCTTGTCCTATTATCTTGATTCGTTGCGCTATGTTAAACCCACCTAACCGT

TGTTTGAAGGACACTGATTGTCCAGGTATCAAAAAGTGCTGTGAAGGTTCTGCGGTATG

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GCTTGTTTCGTTCCACAA or fragment thereof that encodes a polypeptide, which polypeptide
~~that~~ possesses inhibitory activity against human leukocyte elastase.

29. (Currently Amended) A replicable expression vehicle comprising a ~~nucleic~~
~~acid~~ cDNA comprising a nucleotide sequence encoding the amino acid sequence: Ala-
Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-
Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-
Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro- Gln or fragment
of said amino acid sequence, which fragment ~~that~~ possesses inhibitory activity against
human leukocyte elastase, and a vector.

30. (Previously Presented) A transformed host cell comprising said replicable
expression vehicle according to claim 29.

31. (Currently Amended) A method of producing the replicable expression
vehicle according to claim 29 comprising introducing said ~~nucleic acid~~ cDNA into said
vector at an insertion site so that a replicable expression vehicle is obtained that directs
synthesis of said amino acid sequence, or fragment thereof, encoded by said nucleotide
sequence.

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32. (Previously Presented) A method of producing a polypeptide comprising culturing said host cell according to claim 30 under conditions such that said amino acid sequence, or fragment thereof, is produced.

33. (Previously Presented) A method of producing a transformed host cell comprising introducing said replicable expression vehicle according to claim 29 into a host cell.

34. (Currently Amended) An isolated nucleic acid comprising a sequence complementary to the full length of a cDNA ~~a nucleotide sequence~~ encoding the amino acid sequence: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro- Gln or fragment of said amino acid sequence, which fragment that possesses inhibitory activity against leukocyte elastase.

35. (Currently Amended) An isolated nucleic acid comprising a sequence complementary to the full length of the nucleotide sequence:

GCTCAAGAACCAGTTAAAGGTCCTGTGTCTACT

AAGCCAGGTTCTTGTCCTATTATCTTGATTCGTTGCGCTATGTTAAACCCACCTAACCGT

TGTTTGAAGGACACTGATTGTCCAGGTATCAAAAAGTGCTGTGAAGGTTTCCTGCGGTATG

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GCTTGTTTCGTTCCACAA or fragment thereof that encodes a polypeptide, which
polypeptide that possesses inhibitory activity against human leucocyte elastase.

36. (Currently Amended) An isolated ~~nucleic acid~~ cDNA comprising the
nucleotide sequence

GCG CAA GAG CCA GTC AAA GGT CCA GTC TCC ACT AAG CCT GGC TCC TGC
CCC ATT ATC TTG ATC CGG TGC GCC ATG TTG AAT CCC CCT AAC CGC TGC
TTG AAA GAT ACT GAC TGC CCA GGA ATZ AAG AAP TGC TGT GAA GGC TCT
TGC GGG ATG GCC TGT TTC GTT CCC CAG

wherein Z = T, C or A and P = A or G, or sequence complementary thereto.

37. (Previously Presented) An isolated nucleic acid consisting of a nucleotide
sequence encoding the polypeptide: Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-
Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-
Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-
Met-Ala-Cys-Phe-Val-Pro-Gln.

38. (Previously Presented) The nucleic acid according to claim 37 wherein
said nucleotide sequence is GCTCAAGAACCAGTTAAAGGTCCTGTGTCTACT
AAGCCAGGTTCTTGTCCTATTATCTTGATTGCGCTATGTTAAACCCACCTAACCGT
TGTTTGAAGGACACTGATTGTCCAGGTATCAAAAAGTGCTGTGAAGGTTCTGCGGTATG
GCTTGTTTCGTTCCACAA.

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39. (Previously Presented) An isolated replicable plasmid expression vehicle comprising as an insert the nucleic acid according to claim 37.

40. (Previously Presented) An isolated transformed host cell comprising the expression vehicle according to claim 39.

41. (Previously Presented) A process for the preparation of a replicable expression vehicle comprising inserting the nucleic acid according to claim 37 into a vector at an appropriate insertion site so that a replicable plasmid expression vehicle is obtained that directs the synthesis of the polypeptide encoded by said nucleic acid.

42. (Previously Presented) A process for producing a polypeptide comprising culturing the host cell according to claim 40 under conditions sufficient to produce said polypeptide.

43. (Previously Presented) A process for the preparation of a transformed host cell comprising introducing into a host cell the expression vehicle according to claim 39.